

CLAIMS

1. A method of manufacturing a semiconductor device sealed in a cured silicone body by placing an unsealed semiconductor device into a mold and subjecting a curable liquid silicone composition that fills the spaces between the mold and the unsealed semiconductor device to compression molding under a predetermined molding temperature, wherein said curable liquid silicone composition has viscosity of 90 Pa·s or less at room temperature, and wherein a time interval from the moment directly after measurement of a torque with a curometer at the molding temperature to the moment when the torque reached 1 kgf·cm is not less than 1 min., while the time interval during which the torque grows from 1 kgf·cm to 5 kgf·cm is not more than 1 min.  
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2. The method of Claim 1, wherein the curable liquid silicone composition is a hydrosilylation-curable liquid silicone composition.
3. The method of Claim 1, wherein the curable liquid silicone composition, when cured, forms a cured silicone body with a composite modulus of elasticity of 1 GPa or less.
- 15 4. The method of Claim 1, wherein after the semiconductor device has been placed into a lower mold and the curable liquid silicone composition has been fed into a space between an upper mold and the unsealed semiconductor device, the unsealed semiconductor device is clamped between the upper mold and the lower mold, and the curable liquid silicone composition is subjected to compression molding.
- 20 5. The method of Claim 1, wherein at least two semiconductor devices are sealed, and then the obtained sealed assembly is cut into separate sealed semiconductor devices.
6. The method of Claim 1, wherein the semiconductor device comprises semiconductor chips on a printed circuit board, the chips being electrically connected via bonding wires.
- 25 7. The method of Claim 6, wherein the curable liquid silicone composition is applied onto the surface that supports semiconductor chips of the printed circuit board, and the connection between the semiconductor chips and the bonding wires is sealed with a cured silicone body.
8. The method of Claim 1, wherein a release film is applied to the inner surface of the mold.  
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9. The method of Claim 8, wherein the release film is held against the inner surface of the mold by air suction.

10. A semiconductor device produced by the method as disclosed in any of Claims from 1 to 9.